HSE COVID-19: Interim Clinical Guidance: Immunosuppressant Therapy (12th May 2020) v4

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Purpose: This guidance is to aid healthcare professionals to identify patients who may be at increased risk of infection due to ongoing regular immunosuppressant therapy. Risk is stratified into Normal Risk, High Risk and Very High Risk.

Target Audience: Healthcare professionals, including GPs those working in occupational health settings. Patient information is also provided.

Sections 1 and 2 include a list of immunosuppressive therapies. Section 3 gives guidance on whether a person on immunosuppressive treatment is in the high risk or very high risk (extremely vulnerable) group.
There is different advice to protect people in each group. Please see current HSE guidance for at risk groups: https://www2.hse.ie/conditions/coronavirus/at-risk-groups.html
This list of medication is not exhaustive; for a full list and individual product Summaries of Product Characteristics (SPC) see www.hpra.ie.

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Section 1: Corticosteroids

Daily high dose corticosteroids are immunosuppressive. The following doses of prednisolone (or equivalent dose of other glucocorticoid) are likely to be immunosuppressive:

Adults and children weighing 10kg or greater:
Prednisolone 40 mg/day or greater for more than 1 week, or 20 mg/day or greater for 2 weeks or longer
Low to moderate doses of prednisolone: 5mg/ day or greater but less than 20mg/day (or equivalent) for 2 weeks or longer may also increase the risk of infection above that of the general population (please see section 3 for risk stratification).

Children weighing less than 10 kg:
2mg/kg/day for 2 weeks or longer

Equivalent doses of the following glucocorticoids are likely to be immunosuppressive:
Betamethasone
Dexamethasone
Hydrocortisone
Methylprednisolone
Triamcinolone

The following steroid treatment is not considered immunosuppressive and is not considered sufficient to significantly increase risk of infection:

i. Short term (less than 7 days) irrespective of dose
ii. Long term (2 weeks or greater) less than 5mg/day of prednisolone or equivalent
iii. Long-term, alternate-day treatment with short-acting preparations
iv. Maintenance physiologic doses (replacement therapy)
v. Topical (skin or eyes) or by inhalation
vi. Intra-articular, bursal, or tendon injection
vii. Fludrocortisone less than 300 micrograms/day

Use of topical Calcineurin inhibitors (TCIs, e.g., Tacrolimus and Pimecrolimus) for atopic dermatitis in otherwise healthy adults does not result in significant systemic absorption or immunosuppression.
Section 2: Immunomodulatory treatments. Please see section 3 for stratification of immunosuppressive risk.

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Section 3 Risk Stratification

A. Normal risk:
Patients who have an autoimmune disease, with no laboratory evidence of cellular or humoral immunodeficiency, are not taking immunosuppressant therapies and have no additional risks (listed below) are at similar risk to the general population. This includes other medication for auto-immune conditions, including hydroxychloroquine, sulfasalazine, mesalazine, gold products and penicillamine. Some monoclonal antibodies for type 2 inflammation are also in this category. These include: Reslizumab, Benralizumab, Mepolizumab, Omalizumab, Dupilumab (although people on these medicines may be in high risk groups for Covid-19 for other reasons e.g. severe respiratory disease).

B. High risk:
People taking any single medication from section 2 (and not listed in higher risk category C below) without prednisolone 5mg daily or greater in the last 4 weeks.

Or

People taking Prednisolone alone at low to moderate doses (5mg/ day or greater but less than 20mg/day) for 2 weeks or longer

C. Very High risk:
Prednisolone 40 mg/day or greater for more than 1 week, or 20 mg/day or greater for 2 weeks or longer

Or

People taking two or more immunosuppressant medicines.
This includes prednisolone 5mg or greater in the last 4 weeks.

Or

Cyclophosphamide or Rituximab in the last 6 months

Or

People with poorly controlled disease or a history of recurring infections (requiring medical treatment) while on immunosuppressant medication.

Or

Some people with Multiple Sclerosis (refer to Covid-19 HSE Clinical Guidance and Evidence repository: https://hse.drsteevenslibrary.ie/Covid19V2/neurology

Or

People taking one immunosuppressant known to increase the risk of infection or serious infection and also in one or more of the following categories:

- over 70 years of age
- solid organ transplant recipients
- have cancer and are undergoing active chemotherapy, immunotherapy, antibody treatment or other treatment which can affect the immune system,
- severe respiratory conditions including cystic fibrosis, severe asthma & severe COPD
• have rare diseases and inborn errors of metabolism that significantly increase the risk of infections (such as SCID, homozygous sickle cell, primary immunodeficiency disorders)
• are pregnant and have significant heart disease, congenital or acquired

An individual’s risk may be higher or lower than these categories depending on associated risk factors such as smoking or co-morbidities. Groups most at risk of severe infection include people with ischaemic heart disease, hypertension, cerebrovascular disease, type 2 diabetes, obesity, active malignancy in last 5 years, chronic lung disease, chronic renal disease, chronic liver disease. Their clinician may assess this risk and advise them accordingly.
Section 4: Patient information: Immunosuppressive medicines

This information is for people who are being cared for by a:

- rheumatologist
- dermatologist
- gastroenterologist
- respiratory specialist

Being on immunosuppressive treatments is not known to increase your risk of getting a COVID-19 infection (coronavirus).

There is no evidence to date that being on an immunosuppressive treatment puts you at higher risk of severe disease with COVID-19. However, as other infections can cause severe illness in people who are on immunosuppressive treatment, you should take extra care.

Current HSE advice on groups who should be cocooning is available on [www.hse.ie/coronavirus](http://www.hse.ie/coronavirus).

Do not stop or change your medication except on the advice of your doctor. If you stop your medicine you may be more likely to have a flare of your condition during this period.

Immunosuppressive medicines include:

- biologic agents
- steroids
- methotrexate
- azathioprine

**Steroids**

Keep taking steroids if you are usually on them unless your doctor tells you otherwise. Stopping steroids suddenly can make you very unwell.

If you become unwell due to coronavirus or another infection, continue to take your steroids.

Never start taking steroids unless your doctor tells you to.

Steroid tablets include prednisolone – brand name: Deltacortril.

Other steroid medicines do not usually cause immunosuppression. This includes inhalers (inhaled corticosteroids) which are often known as preventer inhalers. It is very important to continue to take your preventer inhaler. This will decrease your risk of an asthma attack or COPD exacerbation and reduce your respiratory symptoms.

Other steroid medicines include nasal sprays or drops, creams and eye or ear drops. All of these medicines should be continued and used as you normally would.
Immunosuppressive treatments

If you attend a consultant, ask them if they recommend any changes to your treatment. But do not make changes unless your doctor tells you to.

There is no evidence to-date that being on an immunosuppressive treatment puts you at higher risk of severe disease. However, as other infections can cause severe illness in people who are on immunosuppressive treatment, you should take extra care.

If you usually have regular blood tests, these should continue. But ring your hospital first as some hospital services are disrupted.

If you become unwell due to coronavirus or another infection, continue to take your steroids. Contact your GP or consultant to ask if they recommend any changes to your steroids or other immunosuppressant treatment. Do this before taking the next dose of your immunosuppressant treatment.

The coronavirus pandemic may last several months. If you reduce or stop your medicine you may be more likely to have a flare during this period. This means you might need to restart your treatment and attend your GP or hospital.

The immunosuppressant effect of each medicine continues for different periods of time after you stop them. You may still be immunosuppressed for a period of time if you stop them, often for many months.

Please check [www.hse.ie/coronavirus](http://www.hse.ie/coronavirus) for current HSE advice.

If you are an essential worker on an immunosuppressant medicine, you should notify Occupational Health or your GP to discuss your options for safe working.

Further information about the level of risk with each medicine is available. This list includes some of the medicines used for the treatment of auto-immune conditions (e.g. rheumatoid arthritis, psoriasis, inflammatory bowel disease) which may increase the risk of infection in general. The list is not exhaustive and for up to date information on all licensed medicines in Ireland visit [www.hpra.ie](http://www.hpra.ie)
References

Individual Summary of Product Characteristics for each drug www.hpra.ie (accessed 1st April 2020)

Occupational health guidance issued 31st March 2020 and updated 15th April 2020
https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/guidance/occupationalhealthguidance/Pregnant%20HCWs,%20Vulnerable%20HCWs&%20Other%20HCWs%20with%20Pre-existing%20Disease.pdf


The HSE list of immunosuppressants from sepsis programme:

